

Cost and Time Performance of Construction Projects under The *Due Process Reform In Nigeria*

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ABSTRACT: *The Due process policy is a product of the Fderal government public procurement reform of 1999. The policy was meant to be an anticorruption device aimed at ensuring probity, transparency, accountability in the procurement of public goods and services. The need for the reform is long overdue. However, in order to assess the implementation of the Due process policy in procurement of construction projects, the study took a survey study of construction projects awarded and executed in federal higher educational institutions in the southwest Nigeria. The study revealed that although cost overrun on such projects was at 19% due to the lump sum nature of the due process reform, time overrun was at the rate of 108%. Financial capability of the client followed by prompt payment were identified respectively for timely completion while delayed payment has the highest contribution to time overrun at 36%. Financial incapability of the contractor has significant contribution to delay in completion of the projects. The study observed that the contracts were awarded on short contract duration, it concluded that the excessive time overrun on such projects is not good for the construction industry in Nigeria as it does not only erode the contractor's profit, it also deprives the client from having his project as at when due. It therefore suggested that there is need to ensure that realistic contract periods are quoted and that the federal government should endeavor to assess the success of the reform so far in order to address the grey areas.*

KEY WORDS: *Due Process, cost overrun, time overrun, performance, prequalification.*

I. INTRODUCTION

The Federal Government of Nigeria in 1999 adopted the use of competitive bidding as a means of procuring public goods and services. The development came on the heels of the economic reform going on in the country as it became imperative that to achieve sanity in the public sector procurement, there was need for a procurement reform. The Budget Monitoring and Implementation Unit (BMPIU) was set up for the monitoring and implementation of the procurement reform which is being referred to as the *Due Process* certification (Ezenwa, 2004[1]; Wahab, 2006[2]). This is referred to as the Bureau for Public Procurement in the Procurement Act of 2007.

The due process reform in the procurement of construction project in Nigeria is in response to the unguarded and uncoordinated way in which public projects were awarded. Considering the fact that the government is the largest consumer of the construction industry product, its procurement policies directly impacts on the activity of the industry. This is so much the case of a developing economy like Nigeria. In order to provide a sane and guarded means of procuring public project, the guidelines are stringently interwoven with lots of bureaucratic intervention. To combat fraud and unreasonably high rates of procurement of public works in Nigeria, the Federal Government introduced competitive bidding as a procurement method emphasized by the *Due Process* reform.

The crux of the *Due Process* reform is to get the lowest responsive and responsible bidder, one who takes into proper consideration the pros and cons of the project if the contract is won. However, researches have shown that contractors are more concerned with "being the lowest bidder" rather than "the responsive and responsible bidder", assuming the "All Goes According to Plan" (AGPA) and not the "What Happens If" (WHIF) as proposed by Flanagan and Norman (1997[3]). In view of these, achieving reasonable performance of construction projects in terms of time and cost cannot be guaranteed which is not good for the health of the construction industry. Consequently, the research question therefore is; 'what is the level of performance of construction projects since the implementation of the *Due Process* reform for the award of public contract for goods and services in Nigeria including those for construction works', what are the factors that influence the performance of construction projects under the due process reform and what are those factors that mitigate effective performance of such projects?.

II. PUBLIC PROCUREMENT REFORM

Public procurement systems across the globe began to receive attention not too long ago. Before the April 11, (9th) International Anti-Corruption Conference held in Abidjan in 1998 which stimulated a new look at procurement in many Countries of the world, procurement was seen as an insignificant part of an administrative function. Wittig (1999[4]) believes that the reviews of public procurement systems in the developed countries in recent times were geared towards improving its efficiency and generating savings in government spending. The United States in 1994, procurement reform of South Africa in 1997 and in 1998, the United Kingdom's call for efficiency in Civil Government led to its public sector reform. The series of economic reforms embarked upon by the Obasanjo led administration starting from 1999 gave birth to the public procurement act in Nigeria which was signed into law on the 4th of June 2007 (Okereke –Onyeri, 2008[5]).

2.1 Procurement Reform In Nigeria

Before the reestablishment of the democratic rule in 1999, the public sector procurement system in Nigeria had witnessed years of economic mismanagement and corruption under the successive military regimes (USAID, 2001a[6]) such as the abandonment of the initial Structural Adjustment Reforms of 1986 by the year 1992 resulting into years of slow and stagnated growth, inflation and increased poverty in Nigeria (USAID, 2001b[7]). In 1999, the Obasanjo led Administration took discreet steps to check the excesses of the previous administrations, combat corruption and build public confidence (USAID, 2001b). This was the beginning of the Procurement Reform in Nigeria and the implementation of the *Due Process* certification in the procurement of public goods and services is one of the cardinal strategies of the economic reform (Wahab, 2006[2]). The Procurement Act of June, 2007 was enacted to provide a legal and operational frame work for proper implementation of the *Due Process* reform. The Procurement Act as stated 'shall apply to the procurement of goods, works and services carried out by the Federal government of Nigeria and all its entities that derives at least 35% of its fund from the Federal government' (Okereke-Onyeri, 2008[5]). The Bureau for Public Procurement is expected to among other things ensure the application of fair, competitive, transparent and value for money standards.

2.2 THE "DUE PROCESS" REFORM

Adedeji (2004[8]) noted that the public sector as the largest client of the construction industry in Nigeria is badly reputed for poor financial probity. The "Due Process Reform" came as an anti-corruption device to entrench the ideals of public procurement systems using the "Due process certification" in the award of contracts for public projects in Nigeria. Collusion between parties to public contracts and acceptance of gratuities from bidding contractors in the award of such contracts has greatly affected the decision-making and executive processes of Nigeria resulting in Legal, Administrative and Economic costs to the Country (Wittig, 1999[4]; Abdullahi, 2004[9] and Esenwa, 2004[1]). The enactment of the due process policy by the Federal government of Nigeria was in line with the World Trade Organization's (WTO) Government Procurement Agreement (GPA). The GPA is supported by the World Bank based on the United Nations Committee on International Trade Law (UNCITRAL) model for public procurement. The "Due Process" reform of the Federal Republic of Nigeria is as contained in the "New Policy Guidelines for Procurement and Award of contracts in Government ministries/parastatals- Ref no FI5775 of 27th June 2001 and the Treasury Circular no ASA55/001 of 30th October, 2001 on "Due Process Certification of contracts (Abdullahi,2004[9]). The BMPIU established for proper implementation of the Due process certification of contracts transformed into the Bureau for Public Procurement with the signing into law the 2007 Public Procurement Act.

Contractor's prequalification is one of the focal points of the procurement reform. The provision of the Due Process certification states that public contracts be awarded within specific thresholds as follows; Contracts below ₦1m, Contracts above ₦1m but below ₦50m and Contracts of ₦50m and above (BMPIU, 2005[10]). Abdullahi (2004 [9]) observed that contracts above ₦10m shall be given notice for 6 weeks while contracts above this threshold will require two- stage certification: Pre-qualification with a minimum of 2 weeks and bidding period of 6 weeks. The lowest price/best evaluated bid shall be awarded the contract.

2.3 PREQUALIFICATION

Waara and Brochner (2006[11]) identified prequalification as the only possible way of protecting the capable and established firms with the client getting a more economical job. It ensures that invitation to bid is only given to the firms who have adequate capabilities and resources to execute the project (Gale, 2006[12]). The effective implementation of competitive bidding is dependent on Contractor's prequalification as this, if adequately implemented, serves to prevent fronting and window dressing by incompetent and corrupt

contractors. The different government circulars on the implementation of the Due Process Certification as summarized by Esenwa (2004[1]) pointed out that the call for pre-qualification is one of the major criteria for the certification of any public projects awarded. Going by the Inter-America Development Banks report (1997[13]); prequalification depends on the “ability of the potential contractors to carry out the works in satisfactory manner”. The criteria for pre-qualification stated in the report include Past experience and results in similar projects, Contractor’s personnel and equipment available, Financial capability of the contractor, Other contracts presently being undertaken, Any litigation or Arbitration from previous contracts in the last five years. The 2007 Procurement Act also stipulates professional and technical qualifications, financial capability, equipment and adequate personnel to execute the contract (Ibrahim, 2008[14]).

III. RESEARCH METHODOLOGY:

The research consists of a survey of *Due process* projects carried out in Federal higher educational institutions in South-western Nigeria which are directly funded by the federal government. The study considered construction projects awarded and undertaken under the *Due Process* reform from 2001 to 2006 since the reform actually took effect in 2001. The field work included the use of structured questionnaire that comprised of two parts; section A and B. The first aspect was to obtain secondary data on *Due Process* projects awarded / executed from 2001 to 2006 to determine the contractors project performance. The second aspect was used to assess the factors that affected the performance of the *Due Process* projects. The limitations to the study included the lack of archival data on construction activities in Nigeria. In order to achieve the aim of the study, project documents in the selected institutions were collated for the purpose of data analysis. To ensure the validity of the data collected, two questionnaires were given out for each specific project, one to the contractor and the other to the client’s representative. The sample consisted of all the fourteen (14) higher educational institutions funded by the Federal Government in the south-western geopolitical zone of Nigeria. A total number of 48 questionnaires were returned for 24 projects representing two per project. However, only 40 questionnaires representing 20 (83%) sample projects were good for analysis. Data on construction projects were available in 12 (86%) out of the 14 higher educational institutions in the study area while data available in the other two institutions were on the procurement of goods and services. Section A considered contractual information on the *Due Process* projects related to the award, bid quotations, contract duration, final contract sum (for projects completed) while section B covered specific project information and risk factors associated with each project under consideration which were administered on the participants identified above. The Resident *Due Process* personnel within the institutions were contacted for specific project information and Contractors for the awarded projects under the scope of the study. Secondary data collated on the initial and final contract sums and duration for individual project were analyzed to determine the rate of cost overrun and delay experienced on each project. The level of cost and time overrun were determined by calculating the mean differences and the rates of increase above the initial contract figures for each of the projects.

IV. RESULTS AND DISCUSSIONS

Table 1: Cost and Time performance of sample projects

Final contract sum (₦ Millions)	Initial contract sum (₦ Millions)	Rate of increase %	Final contract duration (Months)	Initial contract duration (Months)	Rate of increase %
45,000,000	42,230,000	0.0656	7	10	0.4286
15,428,434	13,854,734	0.1136	6	6	0.0000
36,000,000	26,000,000	0.3846	6	30	4.0000
65,944,606	49,944,606	0.3204	11	30	1.7273
12,324,000	8,984,000	0.3718	2	18	8.0000
34,062,225	27,698,375	0.2298	4	4	0.0000
12,890,650	12,776,993	0.0089	6.5	6.5	0.0000
12,000,000	12,000,000	0.0000	3	3	0.0000
24,000,000	22,000,000	0.0909	6	12	1.0000
26,800,000	25,000,000	0.0720	8	20	1.5000
55,156,733	44,156,733	0.2491	7.3	13	0.7808
15,642,000	14,784,000	0.0580	14	24	0.7143
7,142,250	5,334,105	0.3390	3	5	0.6667
14,825,250	13,500,000	0.0982	6	6	0.0000
377,216,148	318,263,546	0.1852	90	188	1.08

Due to the lump sum nature of the Due process contract, the rate of cost overrun is minimal; 0.19, (Table 1). This implies that project performance in terms of cost under the “Due process” is about 81%. This is not without tradeoffs in respect of completion time and quality of the completed project as contractors are made to bear the burden of any extra cost for the project as usual for lump sum contracts. This is not so much a plus to the Due process reform because it erodes the contractor’s profit and morale. On the other hand, time overrun is experienced at the rate of 1.08 i.e. twice the initial contract period. The implication is that the contract periods were exceeded by 108% of the expected contract duration.

Table 2: Factors responsible for timely completion

Response	%
Accurate design	23
Prompt payment	23
Financial capability of client	30
Financial capability of contractor	8
Favorable site condition	8
Favorable weather	8
Subcontractor/Supplier	0
Total	100

In Table 2, the financial capability of the client ranked highest as a factor for timely completion of the projects with 30%, while accurate design and prompt payment were second with 23% each. The financial capability of the contractor, favorable weather and adequate site condition do not have any significant effect on the timely completion of the projects with 8% each. This suggests that the projects completed to time enjoyed prompt payment with little or no design problems. The result shows that although the financial capability of the contractor is one of the requirements for prequalification, it does not have effect on the completion period of the project.

Table 3: Factors responsible for delay in completion

Factors	N_o	%
Design error	6	24
Site condition	3	12
Delay in payment.	9	36
Financial incapability of client	0	0
Financial incapability of contractor	6	24
Subcontractor /supplier	1	4
Total	25	100

Design error, inflation and construction related problems were next with 16%, estimating error and client related problems came third in the list (8%). Subcontractor/supplier had 3% contribution to project delay under the due process reform. Financial incapability of the client did not arise with zero percent.

Table 4: Contract period (months)

Average contract period (months)	N_o	%
3.5	11	61
8.5	5	28
11.5	2	11
21.5	0	0
27.5	0	0
33.5	0	0
Total	18	100

In table 4, 61% of the sample projects have contract periods within 1 to 6 months with an average period of 3½ months while contracts with 7-12 and 13-18 months duration have 28% and 11% respectively. A larger percentage of the due process projects were awarded on short contract period. The longest duration for 11% of the projects is between 13 to 18months with an average of 1year contract period.

Table 5: Number of completed projects

Response	№	%
Projects completed	11	61
Projects not completed	7	39
Total	18	100

In Table 5, only 61% of the sample projects have been completed. Delayed payment (24%) was identified as being highly responsible for time overrun (Table 3).

Table 6: Number of projects completed on time

Response	№	%
projects completed on time	4	36
projects not completed on time	7	64
Total	11	100

Table 6 revealed that a greater percentage, 64% of the projects completed were subject to time overrun. This is a confirmation of the result in table 1. Out of the 61% completed projects, only 36% were completed to time. This implies that 64% of such projects were subject to time overrun while 39% of the projects were yet to be completed.

V. CONCLUSION AND SUGGESTIONS

Construction projects under the *Due process* reform were awarded to pre-qualified contractors. Sixty-one percent of the projects have short contract duration while the longest contract period falls below 18 months. Only 36% of the (61%) completed projects were completed on time which implies that 64% of the Due Process projects experienced time overrun (TABLE 5) at 108%. The financial capability of the client (31%), accurate design and prompt payment (23%) were responsible for timely completion, (TABLE 2) while delay in payment has the highest contribution to untimely completion of the projects as shown in TABLE 3. Design error, inflation, construction related problems and financial incapability of the contractor has the second highest contribution to untimely completion.

In the light of the above, the following suggestions are made:

1. Since the projects are awarded to pre-qualified contractors but mostly on short contract duration, it should be ensured that contract duration quoted are realistic and strictly adhered to in order to avoid time overrun.
2. The *Due Process* contracts are lump sum contracts and the ability of the contractor to access bank loan is very poor due to the inflation rate and high interest rate. Therefore, the economy should be stabilized to provide a leveled playground for contractors while bidding competitively. Contractors should be financially empowered to finance construction projects to eliminate delay arising from late payment.
3. Lastly, the Federal Government should endeavor to assess the success of the reform so far in order to address the grey areas.

REFERENCES

- [1] Esenwa, O. F Jr. (2004) – “*Project Procurement Method in Due process on How to Execute Capital Projects Effectively*” Technical meeting of the Department of Physical Planning and Development. Abuja.
- [2] Wahab, K.A. (2006) – Federal Government Economic Reforms, Human Development and Due Process. *Proceedings of the 1st Annual Lecture of the School of Environmental Technology, Federal University of Technology, Akure.*
- [3] Flanagan, R. & Norman, G. (1997) – Putting risk into perspective. *Risk Management and Construction*. London. Oxford.
- [4] Wittig, A.W. (1999) – Building Value through Public Procurement: A Focus on Africa. *Proceedings of the 9th International Anti-Corruption Conference. Geneva, Switzerland*, available on-line at /www.transparency.or/iacc/9th-iacc/papers/day2/ws2/d2ws2-www.wittig.html/#eval. (accessed 19th October, 2005).
- [5] Okereke-Onyeri, F. A. (2008) – The Procurement Act”. *Proceedings of the workshop of the Nigerian Institute of Quantity Surveyors Lagos, Nigeria.*

- [6] USAID, (2001a) - Nigeria -FY 2001. *Program Description and Activity Data Sheet*, available online at www-usaid.Gov/pubs/bj2001/afr/index.html (accessed 19th October, 2005).
- [7] USAID, (2001b) - Economic Management and Capacity Building {EMCAP}, available online at www-usaid.Gov/pubs/bj2001/afr/ng/620-010.x/s (accessed 19th October, 2005).
- [8] Adedeji, A. (2004) - Challenges facing indigenous contracting firms. *Independent Newspapers Ltd. Lagos*, available online at <http://www.independentng.com>. (accessed August, 2004)
- [9] Abdullahi, I. (2004) –“Utilization of 2004 Capital Appropriations and Due Process Certification by BMPIU”. *Meeting of the Directors of Physical Planning Unit of Federal Universities and Inter-University Centers, Abuja, Nigeria*.
- [10] BMPIU (2005)- *The ABC of the contract Due Process Policy*. A manual on public procurement reform programme in Nigeria. State House, Abuja, Nigeria.
- [11] Waara, F. & Borchner, J. (2006) - A non price criteria for contractor selection. *Journal of construction Engineering and Management.*, 132(8), 797-804.
- [12] Gale, T. (2006) – Construction: Securing a specialty contractor. *Thompson Corporation*. Retrieved February 20th, 2006 from www.refereceforbusiness.com/small/Co-Di/Construction.Intal
- [13] Intra-American Development Bank(1997)- Comparative study on Government Procurement- Free Trade Area of the Americas. Washington D.C. (accessed 26th)
- [14] Ibrahim A. D, (2008) – A critique of the operational philosophy and mechanism of the Public Procurement Act 2007: Construction industry perspective. *Proceedings the Biennial conference of the Nigerian Institute of Quantity Surveyors' Kaduna, Nigeria*.